

**REMARKS**

Claims 1-21 are pending in this application. By this amendment, new claim 21 is added. Support for new claim 21 can be found at least in Figures 4-8. In view of at least the following, reconsideration and allowance of the pending claims are respectfully requested.

**I. Telephone Interview**

The courtesies extended to Applicants' representative by Examiner Martin at the telephone interview held December 3, 2007, are appreciated. In accordance with the results of the interview, this Amendment does not specifically traverse the rejection of claims 17-20 because the claims were not specifically addressed in the Office Action. Furthermore, because claims 17-20 were not addressed, a Final Rejection in reply to this response is not warranted.

**II. Personal Interview**

The courtesies extended to Applicants' representatives by Examiner Martin at the interview held January 18, 2008, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

**III. Claim Rejection under 35 U.S.C. §102**

The Office Action rejects claims 1-5 under 35 U.S.C. §102(b) over U.S. Patent Publication No. 2002/0028367 (Sammes). This rejection is respectfully traversed.

Regarding independent claim 1, the Office Action asserts that paragraphs [0031] and [0039] in Sammes disclose a method of manufacturing a fuel cell that includes forming a conductive layer such that the conductive layer has electrical conductivity and is **electronically-discontinued from the hydrogen-permeable metal layer via the pores** in a thin electrolyte layer formed on the hydrogen-permeable metal layer.

Applicants respectfully submit that paragraph [0031] in Sammes discloses the following: "[t]he middle, electrolyte layer 140 performs two functions: first, it provides mechanical support for cell 100; and second, it provides an ionic conduction pathway for negatively-charged oxygen ions ... A source of hydrogen 165, such as hydrogen gas (H<sub>2</sub>) or natural gas, is passed through the hollow center of the cell 100 and reacts with the oxygen ions to produce water and electricity. The **cathode 120 and anode 160 are connected to terminals (not shown) for conducting electrical current to and from the cell**" (*emphasis added*). Paragraph [0039] in Sammes further provides the same limitation as follows: "[t]erminals (not shown) conduct electrical current to and from the cell."

Therefore, Sammes discloses that electrical current produced by the system is dealt with only by way of terminals that are connected to both the cathode and anode. Sammes does not teach, suggest or disclose forming an electrically conductive layer on the electrolyte layer so that electrons should not pass through the pores in the hydrogen-permeable metal layer, making the electrically conductive layer electronically-discontinued from the hydrogen-permeable metal layer. The electrically conductive layer, as recited in independent claim 1 of the present application, relates to helping to prevent a short circuit by blocking off an electrical connection between the conductive electrolyte layer and the hydrogen-permeable metal layer (paragraph [0006]). Wherein, the conductive electrolyte layer should essentially have proton conductivity (paragraph [0005]) not electron conductivity.

In view of the above discussion, and as confirmed during the personal interview, Sammes does not teach, disclose or suggest "forming a conductive layer on the formed thin electrolyte layer electronically-discontinued with the hydrogen-permeable metal layer via the pores, wherein the conductive layer has electrical conductivity." Therefore, Sammes fails to disclose each and every element recited in claim 1.

Claims 2-5 variously depend from claim 1. Because Sammes fails to teach, disclose or suggest the features recited in independent claim 1, dependent claims 2-5 are patentable for at least the reasons that claim 1 is patentable, as well as for the additional features they recite.

Accordingly, withdrawal of the rejection is respectfully requested.

**IV. Claim Rejection under 35 U.S.C. §103**

The Office Action rejects claims 6-16 under 35 U.S.C. §103(a) over EPO Publication No. 0 621 648 (Ikeda). This rejection is respectfully traversed.

Claims 6-16 variously depend from independent claim 1. Therefore, as discussed above, claims 6-16 are patentable for at least the reasons that claim 1 is patentable, as well as for the additional features they recite.

Accordingly, withdrawal of the rejection is respectfully requested.

**V. Claims Not Specifically Rejected under 35 U.S.C. §102 and/or §103**

The Office Action fails to state under which grounds claims 17-20 are rejected.

Claims 17-20 variously depend from independent claim 1. Therefore, as discussed above, claims 17-20 are patentable for at least the reasons that claim 1 is patentable, as well as for the additional features they recite.

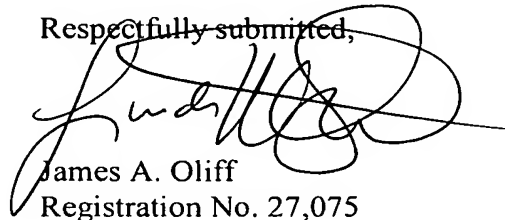
Accordingly, withdrawal of the rejection is respectfully requested.

**VI. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:AAT/ccs

Attachment:  
Amendment Transmittal

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